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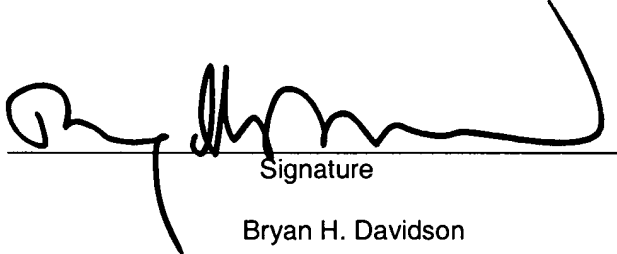


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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)
		30-497
Application Number		Filed
09/262,912		March 5, 1999
First Named Inventor		Vuorinen et al
Art Unit	Examiner	Hug
1731		
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the <input type="checkbox"/> Applicant/Inventor <input type="checkbox"/> Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96) <input checked="" type="checkbox"/> Attorney or agent of record <u>30,251</u> (Reg. No.) <input type="checkbox"/> Attorney or agent acting under 37CFR 1.34. Registration number if acting under 37 C.F.R. § 1.34 _____</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.* <input checked="" type="checkbox"/> *Total of 1 form/s are submitted.</p>		



Signature  
Bryan H. Davidson

Typed or printed name  
703-816-4026  
Requester's telephone number

November 23, 2005  
Date

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**STATEMENT OF ARGUMENTS IN SUPPORT OF  
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

The following listing of clear errors in the Examiner's rejection and/or the Examiner's omissions of essential elements for a *prima facie* basis for rejection are responsive to the Official Action dated June 23, 2005, for which petition is made for an extension of time up to, and including, November 23, 2005.

1. **The Examiner's rejection is based on an erroneous interpretation of the applied references.**

The Examiner has concluded that the applicants' claimed method is "obvious" (35 USC §103(a)) from Vuorinen (WO 96/12063) in view of Change et al (WO 91/05909) and if necessary<sup>1</sup> in view of Hiestad et al (Pulp and Paper Canada) or Carles et al (USP 4,274,912). Applicants suggest that the rejection at issue is based on an erroneous interpretation of the applied references of record and, as such, must be withdrawn.

At the outset, it will be recalled that each of the applicants' independent claims pending herein is directed to a method of treating chemical alkaline pulping process, after cooking and preferably after oxygen delignification, with ClO<sub>2</sub> in a first chlorine dioxide stage of an elemental chlorine free bleaching sequence and of minimizing the use of ClO<sub>2</sub> which ***consists of*** the sequential steps of (a) bleaching in a first ClO<sub>2</sub> step at conditions recited in the claim, (b) effecting an acid treatment of the pulp for step (a) under conditions recited in the claim, and (c) bleaching the pulp from step (b) in a second ClO<sub>2</sub> step.

As applicants have stated already in several responses of record, the Chang et al references teaches (see page 3, line 18 – page 4, line 13; 8, line 23-

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<sup>1</sup> As discussed in section 2 below, applicants' do not fully understand the context of the Examiner's rejection since it is not fully understood whether or not the secondary references to Hiestad et al and Carles et al are actually being combined to rejection the pending claims – i.e., whether or not the Examiner considers such references "necessary" to the rejection.

page 9, line 15) a two-step (high/low pH) chlorine dioxide bleaching process, consisting of the following steps:

- adding chlorine dioxide to a wood pulp suspension and subjecting the pulp suspension to a first treatment step for about 5 to 40 minutes so that the pH is between 6.0 and 7.5; and
- acidifying the suspension and subjecting the mixture to a second treatment step for about 2 or more hours so that the pH at the end of the second step is between 1.9 and 4.2.

There is no additional step after the acidification according to Chang et al, in which  $\text{ClO}_2$  is added to the pulp. In the claims of Chang (page 29), a method is provided in which the charge of chlorine dioxide is split between the first and second steps. The first portion is added so that the end pH of the first step is 6-12, and after that the remaining portion is added and the end pH is 1.9-4.2. It must be noted that the pulp is **not** subjected to any separate acid step between the  $\text{ClO}_2$  additions. Accordingly, Chang teaches a bleaching stage which consists of a first D step and a second D step.

The Vuorinen reference teaches that, because of its ene functionality, hexenuronic acid groups (HexA) react with several bleaching chemicals, such as chlorine dioxide. Vuorinen teaches that the reaction between HexA and  $\text{ClO}_2$  can be prevented by removing HexA from pulp through an acid treatment **prior to bleaching**. In the applicants' pending claims at issue, such an acid treatment is carried out **after** a D step. Thus, in the applicants' pending claims the required acid treatment is done **against** the teachings of Vuorinen, because the acid treatment takes place **after** a D step. Thus, the highly skilled person as well as the person of ordinary skill, would certainly view the teaching of Vuorinen as counseling strictly against acid treatment of the pulp after a D step (as is

accomplished in the present applicants' invention) since to do so would be too late to remove the HexA compounds that would deleteriously react with ClO<sub>2</sub>.

Therefore, an ordinarily skilled person would most certainly not arrive at the applicants' claimed invention by combining Vuorinen and Chang et al. To reiterate, Vuorinen teaches an AD stage. Chang et al et al's method is a DD stage. Therefore, Chang et al teaches that when there are two chlorine dioxide steps, the addition of chlorine dioxide is accomplished *without* any acid step between the D steps. The applicants' claimed invention is therefore directly against the teachings of the Vuorinen and Change et al references, and thus is not obvious therefrom.

2. **The Examiner's rejection is in and of itself erroneous as there is no definitive indication of which references are being applied to reject the claims.**

As noted briefly above, the Examiner cites Histead and Carles et al "if necessary" in combination with Vuorinen et al and Chang et al to rejection the claims under 35 USC §103(a).

Applicants' do not fully understand the context of the Examiner's rejection since it is not fully understood whether or not the secondary references to Histead et al and Carles et al are actually being combined to reject the pending claims – i.e., whether or not the Examiner considers such references "necessary" to the rejection. If they are "necessary" to the rejection, then the Examiner should state such and indicate why they are necessary. Contrary, if such references are not "necessary" to the rejection, they should be omitted from the combination.

As such, the Examiner's rejection is per se erroneous and must be withdrawn.